

METHOD AND APPARATUS FOR PARTITIONING MEMORY IN A TELECOMMUNICATION DEVICE

ABSTRACT

[0039] An apparatus and method are disclosed for partitioning and downloading executable memory images in low-powered computing devices comprised of multiple processors and a mobile station modem. The general computing subsystem **102** handles tasks generally related to a personal digital assistant (PDA) as well as activating the modem computer subsystem **104** and one or more shared memory modules **108-110**. The modem computing subsystem **104** handles tasks associated with a mobile station modem. Power is conserved by not clocking the modem computer system **104** and the shared memory **108-110** during times when modem functions are not needed. The shared memory modules **108-110** are loaded with a binary memory image for use by the modem computer subsystem **104** from a memory **222** under control of the general computing subsystem **102**. When needed, the modem computing subsystem **104** is activated to monitor a paging channel, and disabled when it is no longer desired to monitor the paging channel. Additionally, a second shared memory **110** may be activated and used only when the modem computing system **104** needs to manage a traffic channel.